

ICF Comment #	Date Received	Chapter/ Appendix	Page(s)	Line(s)
1982	7/3/13	11	11-1	2
1983	7/3/13	11	11-1 and 11-2	28-34 and 1-24
1984	7/3/13	11	General	

1985	7/3/13	11	General	
1986	7/3/13	11	General	

1987	7/3/13	11	General	
1988	7/3/13	11	General	
3159	7/2/13	11	11-7	6
3160	7/2/13	11	11-72	34-35
3161	7/2/13	11	11-80	19-21
3162	7/2/13	11	11-74	6-7

Comment	Agency Type
<p>The title of this chapter, Fish and Aquatic Resources, suggests it will include an assessment of impact to aquatic habitat; however, aquatic habitat is evaluated in “Chapter 12 Terrestrial Biology.” The quality and quantity of aquatic habitat seems an important element of protecting T & E fish species. Why is the quality and quantity of aquatic habitat evaluated in the Terrestrial Biological Resources Chapter? This is confusing.</p>	Cooperating
<p>This section describes aquatic habitat in the Delta and Suisun with a minor discussion about the salinity gradient and how it defines quality and quantity of aquatic habitat for target fishes. This section and this chapter should include an analysis of impacts to important open water aquatic habitats defined by the salinity gradient, e.g, marine and low salinity zones, and migratory corridors. These habitats should be included in the “Areas of Potential Environmental Effects” and included in the analysis of impacts to aquatic resources. The Low Salinity Zone is minimally described in this section but the quality and quantity of this habitat is not evaluated as primary and migratory habitat for target species.</p> <p>The salinity gradient, as approximated by X2, has an inverse relationship with many bay and estuarine species. For many species, fish populations go down as X2 goes up (salinity intrusion into freshwater increases).</p> <p>Estimating changes to the salinity gradient for each operational scenario is important for understanding how the quantity and quality of estuarine habitats and fish populations change under CM1 operational scenarios A through G.</p> <p>This can be done using one-dimensional equations that calculate X2. Has X2 been calculated, seasonally or year round, for each of the operational scenarios A through G?</p> <p>A more holistic approach is using three-dimensional modeling (more equations) that maps the salinity gradient within the estuary. This makes it possible to estimate the size and location of salinity zones, such as the low salinity zone, under different operational scenarios.</p>	Cooperating
<p>Estimates of relative fish population changes (increases or decreases relative to baseline) or estimates of absolute changes to fish populations are not estimated or disclosed in this section. Were these estimates generated? These evaluations are necessary for informed decision making regarding actions that contribute to recovery of endangered species and/or meet the biological goals and objectives in the HCP.</p>	Cooperating

<p>Freshwater flow may be the best tool available to improve fish population response and protect aquatic life beneficial uses prior to the completion of planned restoration projects. Relative fish population responses to freshwater flow can be estimated using regression equations provided in the peer reviewed literature cited below. We recognize that these equations do not directly include the effects of tidal marsh and floodplain restoration on fish populations; however, we recommend that these tools be acknowledged in the EIS, with a explanation of why they were not used to estimate fish population responses to the proposed actions.</p> <p>Kimmerer, W. J. 2002. Effects of freshwater flow on abundance of estuarine organisms: Physical effects or trophic linkages? Marine Ecology Progress Series 243:39-55</p> <p>United States Fish and Wildlife Service, September 27, 2005, Recommended Streamflow Schedules To Meet the AFRP Doubling Goal in the San Joaquin River Basin (FWS 2005), pp. 27 available at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/docs/sjrf_sprinfo/afrp_2005.pdf</p> <p>Scientists will have improved ability to measure effects on fish populations as a function of tidal marsh and floodplain restoration projects after restoration projects are started and measurements and monitoring data become available.</p>	Cooperating
<p>Comparing impacts on fish populations from project alternatives to existing conditions does not reflect the fact that existing conditions are very poor for fish populations and there is general agreement among scientists that native and migratory fish populations need to increase in order achieve self-sustaining population levels.</p> <p>Comparisons of fish population responses to project alternatives should be made to biological goals and objectives so that project alternatives can be distinguished from one another.</p>	Cooperating

Aquatic life benefits from the northern intake bypass flows are not clear and/or appear to be minimal. It appears that there is minimal improvement in fish entrainment and loss from operating a new Delta Conveyance because the times and conditions during which the entrainment effects of the present facilities are of greatest concern will continue to occur after the Delta Conveyance facilities are operating, since use of the northern intakes will be limited to times of higher Sacramento River flows per the North Delta Bypass criteria. At these times, entrainment at south Delta facilities has historically been low. South Delta intake facilities will continue to operate at times when Sacramento River flows are not high enough to operate the Sacramento intakes, which includes the conditions when entrainment effects of the south Delta facilities are greatest for T & E species.	Cooperating
Estimated environmental benefits from dual diversion points (north and south Delta) may be reduced by issues that are not addressed in CM1. The current trash racks, fish screens and diversion facilities in the south Delta are not proposed to be changed. Invasive aquatic weeds and deferred maintenance have greatly impaired the effectiveness of the fish screens for much of the last 20 years. Redirecting diversions to these facilities will expose fish to the threats of salvage operations and ineffective screens. In addition, the impact of an invasion of Dreissenid mussels into the Delta, specifically to the southern Delta, is not addressed in CM1. The invasion of these mussels is very probable and the southern Delta provides suitable habitat for Dreissenid mussels. Impacts from these mussels on freshwater diversions in the Great Lakes and Lake Mead would be informative.	Cooperating
Change to USACE permitting activities that authorize dredge and fill and other...	Cooperating
Remove "should" . Proposed activities WILL require 404 permits (and other permissions)	Cooperating
The Delta Plan is in draft form but goal isn't "increased" water supply reliability, it is more reliable water supply, or reliable water supply. It also calls for reducing reliance on the Delta watershed by recommending that all local agencies implement local plans to diversify water supplies, improve efficiency, and plan for drought and interruption of supplies in an inherently volatile system (Delta Stewardship Council 2012).	Cooperating
Add ...construction of any structure in, under, or over any navigable water of the United States...	Cooperating

Response	Comment Type	Status
This chapter is limited to aquatic biological resources, including species. Insofar as terrestrial species occupy both terrestrial and aquatic habitats, those have been addressed in Chapter 12. The chapter addresses aquatic habitats in terms of their support for aquatic species only and discussion of habitat conditions appears throughout the analysis.	I	D
	I	N
Cannot tell which section commenter is referring to	I	N

The EIR/EIS is required to evaluate impacts of alternatives against a baseline condition (No Action or Existing Conditions). This additional analysis being requested is not within the purview of the EIR/S. The BDCP biological goals and objectives, conservation strategy, and avoidance and minimization measures are intended to provide for recovery of covered species.	P	N

	P	
	P	
ICF has made this change	E	D
ICF has made this change	E	D
ICF has made this change	E	D
ICF has made this change	E	D

The entries under the “Comment Type” column are as follows:

E – editorial

T – technical items for which the commenter has provided suggested text

I – technical items for which ICF has developed a resolution

P – policy items and/or items that may need further input from the Lead Agencies

The entries under the “Status” column are associated with the following:

D – done as was requested by the commenter

M – done, with some modifications to what was suggested

N – done, with no changes made to the text (but with a draft response)

If the comment has not been resolved yet, the column has been left blank